



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,230	07/13/2001	Naoki Yumiyama	YMOR:214	9837

7590 03/10/2004  
Parkhurst & Wendel  
1421 Prince Street Suite 210  
Alexandria, VA 22314-2805

EXAMINER
----------

ORTIZ CRIADO, JORGE L

ART UNIT	PAPER NUMBER
----------	--------------

2655

/0

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/889,230

Applicant(s)

YUMIYAMA, NAOKI

Examiner

Jorge L Ortiz-Criado

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Okano U.S. Patent No. 5,161,142.

Regarding claim 1, Okano discloses an optical disk reproducing device for reproducing a disk-shaped recording medium on which a recording has been made (See Abstract, col. 2, lines 21-26; col. 5, lines 26-65; Fig. 2, ref# 10, 18),

constant angular velocity (CAV) means for controlling a spindle motor from start of spin-up processing of such a disk-shaped recording medium to a read standby state (See , lines 21-26; col. 5, lines 26-65; Fig. 2, ref# 10, 18)

Regarding claim 2, Okano discloses wherein said CAV means for controlling a spindle motor is for controlling the spindle motor when a disk-shaped recording medium rotates a low speed (See Abstract, col. 2, lines 21-26; col. 5, lines 26-65; Fig. 2, ref# 10, 18).

***Claim Rejections - 35 USC § 103***

Art Unit: 2655

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Okano U.S. Patent No. 5,161,142.

Regarding claim 3, admitted the prior art teaches a method of spin-up processing for reproducing a disk-shaped recording medium on which a recording has been made (See page 2, lines 4-7; see flowchart of Fig. 3), the method comprising:

performing servo adjustment and acquiring a LEAD-IN final address (See page 2, lines 16-18; see Fig. 3 step2 and step 3);

conducting constant linear velocity CLV measurement (See page 2, lines 18-19; see Fig. 3 step 4) and

setting an angular velocity of a disk-shaped recording medium to be slower than maximum rotational speed to perform a predetermined processing (See page 2, lines 23-25; see Fig. 3 step 6);

and performing HOLD TRACK (See page 2, lines 33-34; see Fig. 3 step 10).

The admitted prior art does not teach controlling a spindle motor by constant angular velocity (CAV) control from start of spin-up processing to a read standby state.

However this feature is well known in the art as evidenced by Okano, which discloses a method of spin-up processing for reproducing a disk-shaped recording medium on which a recording has been made on which recording is made controlling the spindle motor by constant

Art Unit: 2655

angular velocity (CAV) control from start of spin-up processing to a read standby state (See Abstract, col. 2, lines 21-26; col. 5, lines 26-65).

Therefore it would have been obvious to one ordinary with skill in the art at the time of the invention to set the spindle motor to be driven under CAV control and accomplish the spindle motor during process from start of the spin-up processing to a read standby state in order to reduce the time period of search operation after, avoid generation of heat and vibrations by the spindle motor and further prevent errors during data reading as suggested by Okano.

Regarding claim 4, the admitted prior art further teaches wherein setting angular velocity of a disk-shaped recording medium to be slower than a maximum rotational speed comprises setting angular velocity to be half of the maximum rotational speed (See page 2, lines 23-25; see Fig. 3 step 6).

### ***Response to Arguments***

5. Applicant's arguments filed 12/16/2003 have been fully considered but they are not persuasive.

Applicant's response to the rejection of claim 1-4 as unpatentable over Okano.

Applicants argued that Okano does disclose means for controlling a spindle motor by CAV control of the spindle motor from start of spin-up processing of the disk-shaped recording medium to a read standby state.

Art Unit: 2655

The Examiner <sup>argued</sup> ~~because~~ Okano discloses means for controlling a spindle motor by CAV control of the spindle motor from start of spin-up processing of the disk-shaped recording medium to a read standby state (See Abstract, col. 2, lines 21-26; col. 5, lines 26-65; Fig. 2, ref# 10, 18). Okano discloses a controlling the spindle motor by CAV servo circuit 18 in response to a speed detector 10 and the system controller 12 so that the rotational speed of the disk equals the predetermined value designated by the system controller independently of the radial position of the pickup before any search command to reach the information reading point where the read standby state is made. Then the spindle motor is controlled also by CAV during the search operation is made to reach the information reading point where the read standby state is made.

Therefore, Okano clearly discloses means for controlling a spindle motor by CAV control of the spindle motor from start of spin-up processing of the disk-shaped recording medium to a read standby state.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2655

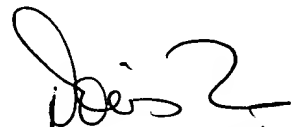
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm), Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

joc

  
DORIS H. TO 3/8/04  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800